



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,441	05/18/2001	Atsushi Shinozaki	Q64569	3711

7590 12/20/2004  
SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

MURPHY, RHONDA L

ART UNIT	PAPER NUMBER
----------	--------------

2667

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/859,441

**Applicant(s)**

SHINOZAKI, ATSUSHI

**Examiner**

Rhonda Murphy

**Art Unit**

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/22/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. The drawings are objected to because stations **41** and **42** in Figure 3 shall be labeled as Base Station, opposed to Base Station Control Unit. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3,4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art figure 1, in view of Kanji (JP 2897769).

**Regarding claims 1 and 4**, Figure 1 of the admitted prior art shows base stations of different service networks communicating to it's respective base station control unit of different service networks, through a transmission path, transmitter and line multiplexer/demultiplexer. The prior art depicted in figure 1 fails to teach a common transmission path, transmitter and line multiplexer/demultiplexer.

However, Kanji teaches a common transmission line **50**, transmitter and time slot multiplex/demultiplex control section **200**, between base stations **1, 10** and base station controllers **2, 20** of new and existing systems (different service networks), as shown in Figure 1.

In view of this, having the applicant's admitted prior art and then given the teachings of Kanji, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system by incorporating a

Art Unit: 2667

common transmission path and multiplexer/demultiplexer, for the purpose of reducing the cost of building new transmission lines (see abstract).

**Regarding claims 1 and 3**, Figure 1 of the admitted prior art shows base station control units of different services networks with separate transmission lines, and Kanji teaches sharing transmission lines between service networks. A PDC system and IMT-2000 system were not explicitly disclosed as the different service networks.

However, it is known in the art that a PDC system, IMT-2000 system or any type of system can be implemented on a shared transmission path to provide services in a communication network.

**Regarding claims 4 and 6**, Figure 1 of the admitted prior art shows base station control units of different services networks with separate transmission lines, and Kanji teaches sharing transmission lines between service networks. A PDC system and IMT-2000 system were not explicitly disclosed as the different service networks.

However, it is known in the art that a PDC system, IMT-2000 system or any type of system can be implemented on a shared transmission path to provide services in a communication network.

5. Claims 2-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art and Kanji as applied to claims 1 and 4 above, and further in view of Afanador et al. (US 6,317,426).

Art Unit: 2667

**Regarding claims 2 and 5**, the applicant's admitted prior art in Figure 1 shows two systems with dedicated lines. No common interface is necessary to differentiate data between these systems using dedicated lines.

However, an interface or line terminating set is necessary for a system implementing different protocols as shown by Afanador. Afanador shows an ATM-STM line interface between the ATM system (Fig. 1, **36**) and the STM system (**37**), and line multiplexer/demultiplexer (**57**).

In a system that shares a common transmission path and multiplexer/demultiplexer, it would have been obvious to one having ordinary skill in the art, to modify the system shown by the admitted prior art and Kanji, by utilizing a line interface to transmit ATM data and STM data, for the purpose of providing services of different systems on a shared transmission path.

**Regarding claims 2 and 3**, the applicant's admitted prior art, Kanji and Afanador disclose a shared transmission line and interface in ATM and STM systems. ATM and STM systems are implemented in various networks. A PDC and IMT-2000 network is not explicitly disclosed by the admitted prior art, Kanji or Afanador.

However, it is known in the art that that a PDC network and IMT-2000 network utilize ATM and STM systems. Thus, modifying the system of admitted prior art, Kanji and Afanador, provides a PDC and IMT-2000 network that utilizes ATM and STM protocols for transmitting data along a shared transmission line.

**Regarding claims 5 and 6**, the applicant's admitted prior art, Kanji and Afanador disclose a shared transmission line and interface in ATM and STM systems. ATM

and STM systems are implemented in various networks. A PDC and IMT-2000 network is not explicitly disclosed by the admitted prior art, Kanji or Afanador.

However, it is known in the art that that a PDC network and IMT-2000 network utilize ATM and STM systems. Thus, modifying the system of admitted prior art, Kanji and Afanador, provides a PDC and IMT-2000 network that utilizes ATM and STM protocols for transmitting data along a shared transmission line.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

\* Ishii et al. (US Patent 6,643,524) discloses a base station serial connection communication system in a mobile communication system.

\* Sutton et al. (US Patent 6,148,010) discloses a method and apparatus for distributing and consolidating data packets onto multiple network interfaces.

\* Suzuki (US Patent 6,490,264) discloses a data transmission method and system.

\* Kim et al. (US Patent 6,469,999) discloses a method for connecting daisy chained base transceiver stations by utilizing a multiplexer and demultiplexer and the apparatus thereof.

\* Forslow (US Patent 6,608,832) discloses a common access between a mobile communications network and an external network with selectable packet-switched and circuit-switched services.


Art Unit: 2667

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rlm

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

12/13/04